Question ID e312081b

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: e312081b

$(x+5)+(2x-3)$

$x+5+2x-3$

$3x+2$

1.1

Which of the following is equivalent to the given expression?

A. $3x-2$

B. $3x+2$

C. $3x-8$

D. $3x+8$

Question ID 1d3fee25

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: 1d3fee25

$3x + 15 - 6$

$3x + 9$

1.2

Which of the following is equivalent to $3(x+5)-6$?

A. $3x-3$

B. $3x-1$

C. $3x+9$

D. $15x-6$

Question ID 60fdb4d4

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: 60fdb4d4

$2x^2-4+3x^2-2x+7$

$5x^2-2x+3$

1.3

Which expression is equivalent to $(2x^2-4)-(-3x^2+2x-7)$?

A. $5x^2-2x+3$

B. $5x^2+2x-3$

C. $-x^2-2x-11$

D. $-x^2+2x-11$

Question ID 49efde89

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: 49efde89

1.4

The expression $2x^2 + ax$ is equivalent to $x(2x + 7)$ for some constant a. What is the value of a ?

A. 2

B. 3

C. 4

(D) 7

$2x^2 + ax = x(2x+7)$

$2x^2 + ax = 2x^2 + 7x$

$ax = 7x$

$a = 7$

Question ID 9ed9f54d

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: 9ed9f54d

1.5

Which of the following is equivalent to $2(x^2-x)+3(x^2-x)$?

$2x^2-2x+3x^2-3x$

$5x^2-5x$

A. $5x^2-5x$

B. $5x^2+5x$

C. $5x$

D. $5x^2$

Question ID 294db8ec

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: 294db8ec

1.6

Which of the following is equivalent to $2x^3+4$?

$2(x^3+2)$

A. $4(x^3+4)$

B. $4(x^3+2)$

C. $2(x^3+4)$

D. $2(x^3+2)$

Question ID 6e06a0a7

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: 6e06a0a7

1.7

Which of the following expressions is equivalent to $2a^2(a+3)$?

$2a^3+6a^2$

A. $5a^3$

B. $8a^5$

C. $2a^3+3$

D. $2a^3+6a^2$

Question ID df0ef054

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: df0ef054

$(2x^3+3x)(x^3-2x)$

$2x^6-4x^4+3x^4-6x^2$

$2x^6-x^4-6x^2$

1.8

Which of the following is equivalent to the expression above?

A. x^3+5x

B. $3x^3+x$

C. $2x^6-x^4-6x^2$

D. $3x^6-x^4-6x^2$

Question ID 127b2759

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: 127b2759

1.9

Which expression is equivalent to $8 + d^2 + 3$?

d^2+11

A. $d^2 + 24$

B. $d^2 + 11$

C. $d^2 + 5$

D. $d^2 - 11$

Question ID fb96a5b3

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: fb96a5b3

1.10

Which of the following expressions is equivalent to $2(ab-3)+2$?

$2ab-6+2$
$2ab-4$

A. $2ab-1$

B. $2ab-4$

C. $2ab-5$

D. $2ab-8$

Question ID e597050f

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: e597050f

1.11

Which expression is equivalent to $9x + 6x + 2y + 3y$?

15x + 5y

A. $3x + 5y$

B. $6x + 8y$

C. $12x + 8y$

D. $15x + 5y$

Question ID 1e8d7183

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: 1e8d7183

1.12

Which expression is equivalent to $256w^2 - 676$?

A. $(16w - 26)(16w - 26)$

B. $(8w - 13)(8w + 13)$

C. $(8w - 13)(8w - 13)$

D. $(16w - 26)(16w + 26)$

Question ID 0354c7de

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: 0354c7de

$5x+15$

$5(x+3)$

1.13

Which of the following is equivalent to the given expression?

A. $5(x+3)$

B. $5(x+10)$

C. $5(x+15)$

D. $5(x+20)$

Question ID 974d33dc

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: 974d33dc

1.14

Which of the following expressions is equivalent to the sum of (r^3+5r^2+7) and $(r^2+8r+12)$?

$r^3+5r^2+7+r^2+8r+12$

A. r^5+13r^3+19

$r^3+6r^2+8r+19$

B. $2r^3+13r^2+19$

C. $r^3+5r^2+7r+12$

D. $r^3+6r^2+8r+19$

Question ID d4d513ff

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: d4d513ff

1.15

Which expression is equivalent to $12x + 27$?

A. $12(9x + 1)$

B. $27(12x + 1)$

C. $3(4x + 9)$

D. $3(9x + 24)$

$3(4x+9)$

Question ID 5dd53f73

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: 5dd53f73

1.16

Which expression is equivalent to $34x + 34y$?

34(X+Y)

A. $34xy$

B. $34(x + y)$

C. $68y$

D. $68x$

Question ID 4ac59df6

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: 4ac59df6

1.17

Which expression is equivalent to $(8yz)(y)(7z)$?

$8y^2z(7z)$

A. $56y^2z^2$

$56y^2z^2$

B. $56y^2z$

C. $56yz$

D. $16yz$

Question ID 72ebc024

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	■□□

ID: 72ebc024

1.18

Which expression is equivalent to $16x^3y^2 + 14xy$?

A. $2xy(8xy + 7)$ 2XY(8X²Y+7)

B. $2xy(8x^2y + 7)$

C. $14xy(2x^2y + 1)$

D. $14xy(8x^2y + 1)$